

What is the recommended conservative management for individuals with insertional Achilles tendinopathy?

To answer this question, a comprehensive search of PubMed database was performed in August 2013.

Articles selected for review included clinical commentary (3), 2 systematic reviews (1,2), pilot prospective cohort study (4) and randomized control trial (5). Additional review and expert opinion articles were not included due to degree of overlap.

There is consensus that course of conservative treatment should precede surgical management for patients with insertional Achilles tendinopathy, though length and type of treatment to apply is unclear (1-3). Wiegerinck et al conducted systematic review of treatments for insertional AT including injections, extracorporeal shock wave therapy (ESWT), and eccentric exercise (1). There was limited evidence to support injections and ESWT, and in contrast to treatment of mid-substance AT, it was found that full range eccentric exercise resulted in lower patient satisfaction and

smaller decreases in pain compared to floor level eccentrics (1). Kearney et al also suggested that eccentric loading does not appear to be as effective for insertional AT (2). Similarly, Irwin emphasized lack of evidence specific to insertional AT for or against use of activity modification, eccentric exercise, ECWT, corticosteroid injection, and sclerosing therapy (3).

In RCT of 50 patients with chronic insertional AT, Rompe et al found success rate of 64% among patients who received 3 low-energy shock wave treatments, compared to only 28% of patients completing 12 wks of eccentric exercise (5). Subsequently, Jonsson et al conducted pilot study among 27 patients to evaluate eccentric exercise without dorsiflexion component among patients with insertional AT, and found that 67% of subjects reported "satisfaction" with treatment and were able to return to prior activities (4). During dorsiflexion component of eccentric exercise, Achilles insertion may undergo compressive forces due to impingement of tendon, bone and bursa (4).

Based on articles reviewed, there is limited evidence to guide conservative management of insertional Achilles tendinopathy. Eccentric loading of calf muscle through protected range of motion appears to be promising exercise-focused approach.

Check with the provider of this newsletter to learn more about exercises appropriate for this condition.

1. Wiegerinck JI, Kerkhoffs GM, van Sterkenburg MN, Sierevelt IN, van Dijk CN. Treatment for insertional Achilles tendinopathy: a systematic review. *Knee Surg Sports Traumatol Arthrosc.* 2013 Jun;21(6):1345-55. doi: 10.1007/s00167-012-2219-8. Epub 2012 Oct 6. PubMed PMID: 23052113.
2. Kearney R, Costa ML. Insertional achilles tendinopathy management: a systematic review. *Foot Ankle Int.* 2010 Aug;31(8):689-94. doi: 10.3113/FAI.2010.0689. Review. PubMed PMID: 20727317.
3. Irwin TA. Current concepts review: insertional achilles tendinopathy. *Foot Ankle Int.* 2010 Oct;31(10):933-9. doi: 10.3113/FAI.2010.0933. Review. PubMed PMID: 20964977.
4. Jonsson P, Alfredson H, Sunding K, Fahlström M, Cook J. New regimen for eccentric calf-muscle training in patients with chronic insertional Achilles tendinopathy: results of a pilot study. *Br J Sports Med.* 2008 Sep;42(9):746-9. doi: 10.1136/bjism.2007.039545. Epub 2008 Jan 9. PubMed PMID: 18184750.
5. Rompe JD, Furia J, Maffulli N. Eccentric loading compared with shock wave treatment for chronic insertional achilles tendinopathy. A randomized, controlled trial. *J Bone Joint Surg Am.* 2008 Jan;90(1):52-61. doi: 10.2106/JBJS.F.01494. PubMed PMID: 18171957.